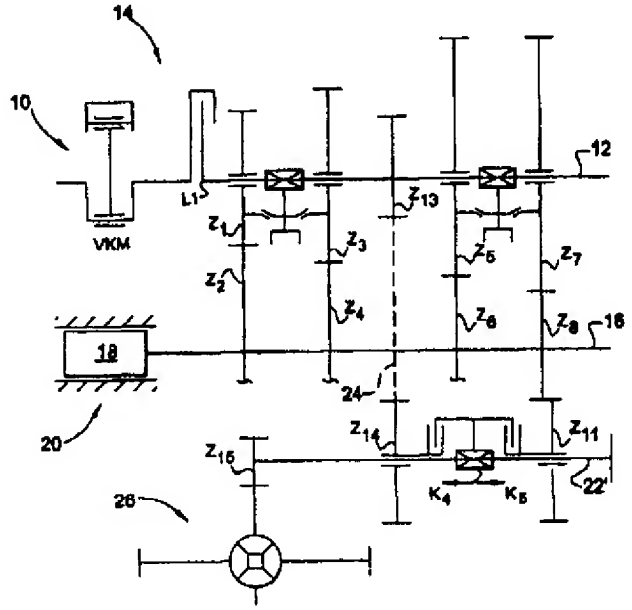
UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,640,088 B2
APPLICATION NO. : 10/017731
DATED : October 28, 2003
INVENTOR(S) : Timothy A. Thomas, Xiangyang Zhuang and Frederick W. Vook

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Please delete drawing figure on title page



Please insert on the title page the drawing figure that is illustrated as it is shown here attached

Please delete drawing figure 1

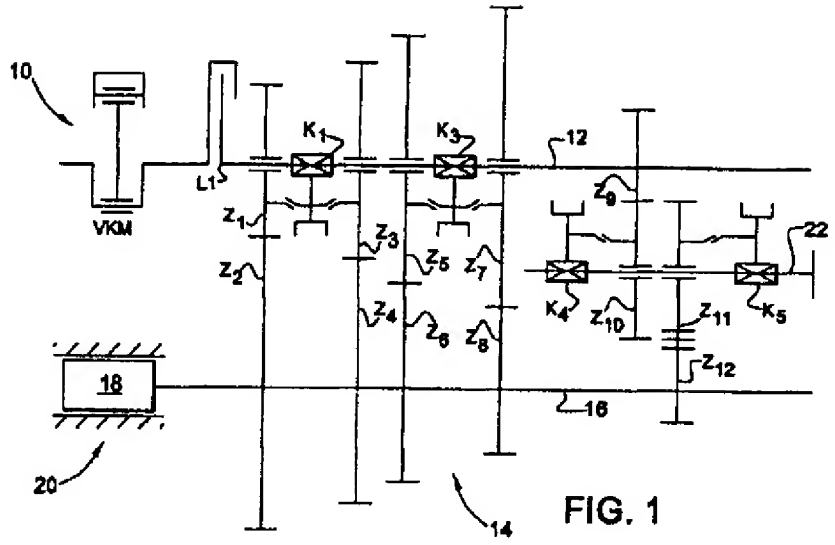


FIG. 1

Please insert drawing figure 1 as illustrated below

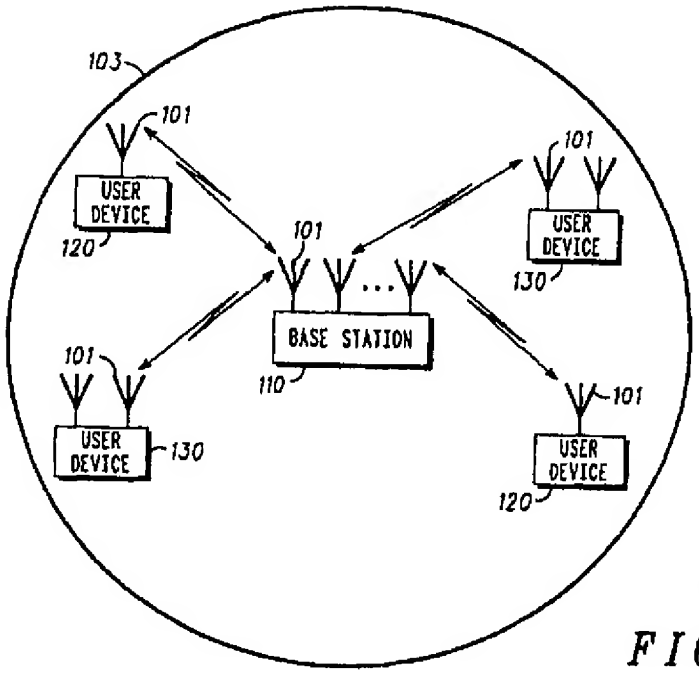


FIG. 1

Please delete drawing figure 2

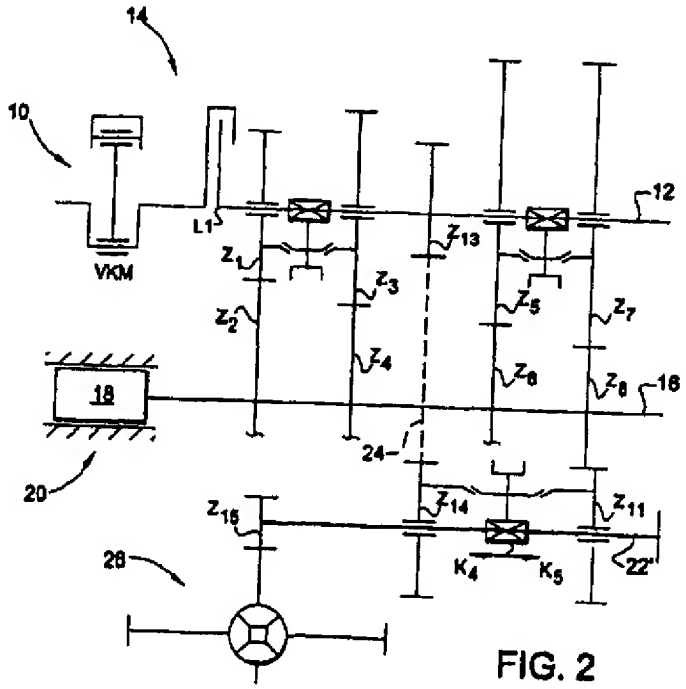


FIG. 2

Please insert drawing figure 2 as illustrated below

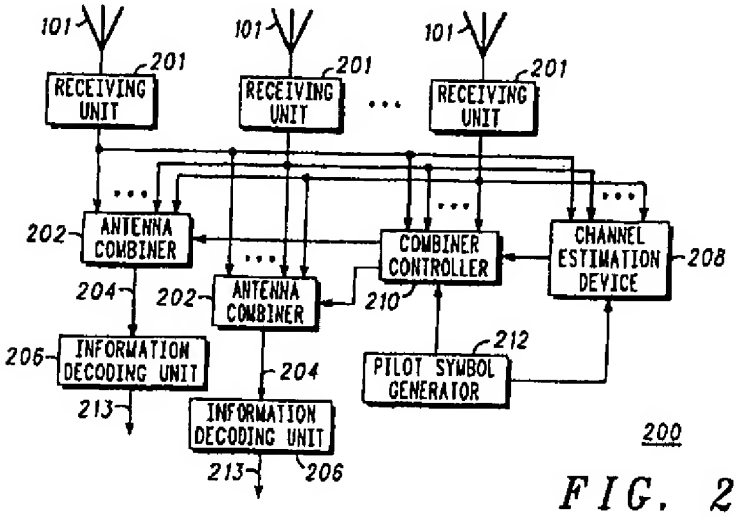


FIG. 2

Please delete drawing figure 3

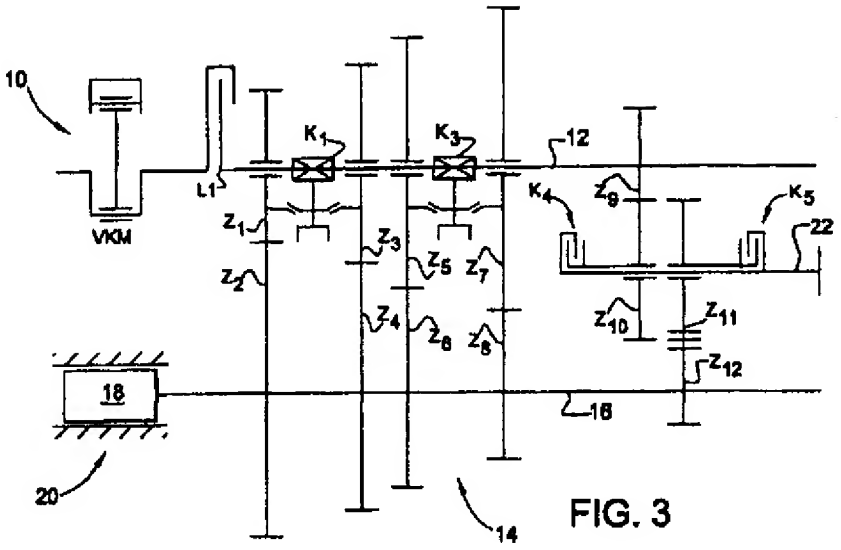


FIG. 3

Please insert drawing figure 3 as illustrated below

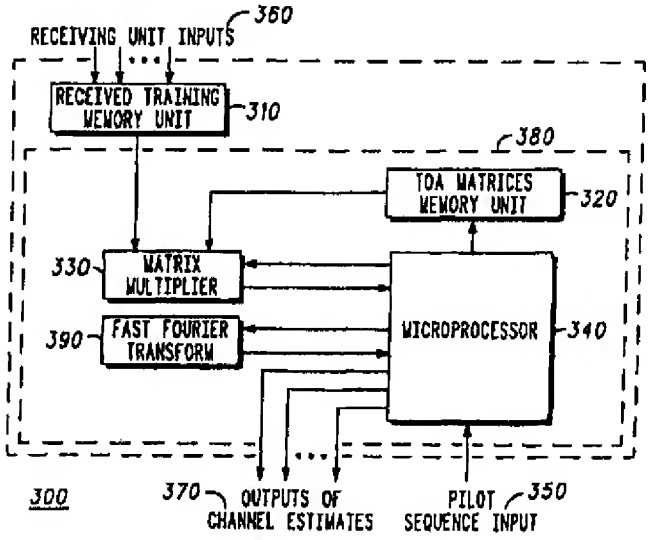


FIG. 3

Please delete drawing figure 4

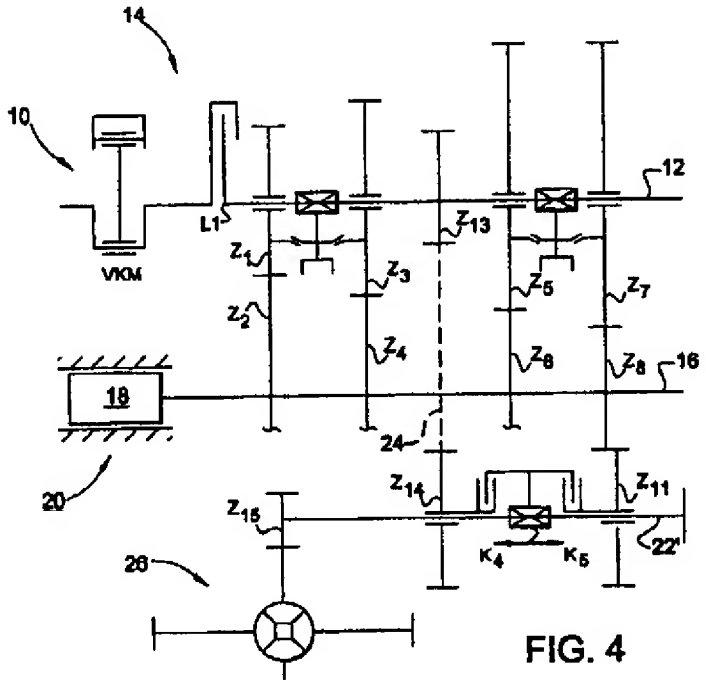


FIG. 4

Please insert drawing figure 4 as illustrated below

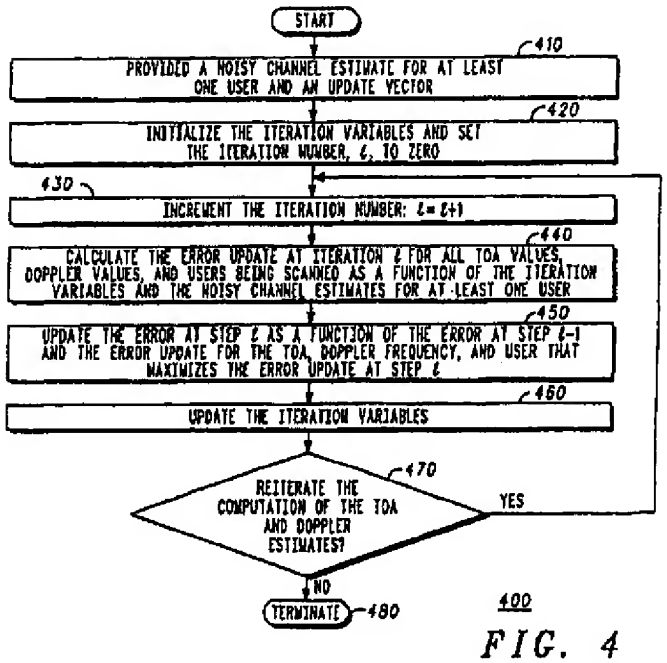


FIG. 4

Column 14:

Line 30, claim 1 please delete "die" and replace with "the"
Line 39, claim 2 please delete "cap" and replace with "tap"
Line 56, claim 4 please delete "Function" and replace with "function"

Column 15:

Line 10, claim 6 please delete "For" and replace with "for"

Signed and Sealed this

Twelfth Day of January, 2010

David J. Kappos

David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Thomas et al.

(10) **Patent No.: US 6,640,088 B2**
(45) **Date of Patent: Oct. 28, 2003**

(54) **METHOD AND SYSTEM FOR ADAPTIVE CHANNEL ESTIMATION TECHNIQUES**

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(73) Assignee: **Motorola, Inc.**, Schaumburg, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 28 days.

(21) Appl. No.: **10/017,731**

(22) Filed: **Dec. 14, 2001**

(65) **Prior Publication Data**

US 2003/0114164 A1 Jun. 19, 2003

(51) **Int. Cl.**[7] **H04B 17/00**; H04L 27/06

(52) **U.S. Cl.** **455/67.11**; 455/67.14; 455/67.13; 455/67.16; 375/340; 375/148

(58) **Field of Search** 455/67.1, 67.3, 455/452, 67.11–67.14; 375/340, 230, 148

(56) **References Cited**

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T. A. Thomas, Fred W. Vook, Kevin L Baum, "*Least-Squares Multi-User Frequency-Domain Channel Estimation for Broadband Wireless Communication Systems*," 37th Allerton Conference, Monticello, IL, Sep. 1999, 10 pages.

* cited by examiner

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Assistant Examiner—Lana Le
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(57) **ABSTRACT**

The invention provides a method of determining an adaptive channel estimation by providing a channel estimate, determining at least one channel condition, and determining an adapted channel estimate as a function of the channel estimate and the channel condition.

8 Claims, 4 Drawing Sheets